



Dean K. Matsuura  
Manager  
Regulatory Affairs

November 2, 2009

2009 NOV -2 A 8:34  
PUBLIC UTILITIES  
COMMISSION

FILED

The Honorable Chairman and Members  
of the Hawaii Public Utilities Commission  
Kekuanaoa Building, First Floor  
465 South King Street  
Honolulu, Hawaii 96813

Dear Commissioners:

Subject: Docket No. 2008-0083 – Hawaiian Electric 2009 Test Year Rate Case  
Hawaiian Electric Hearing Exhibits for Panel 13

Hawaiian Electric Company, Inc. (“Hawaiian Electric”) hereby submits the enclosed hearing exhibits:

Hearing Exhibit 7 – Update of Dr. Roger A. Morin, Rate of Return on Common Equity;  
Hearing Exhibit 8 – Updated Composite Embedded Cost of Capital, Test Year 2009 Average.

Very truly yours,

A handwritten signature in black ink, appearing to read "Dean K. Matsuura".

Enclosures

cc: Division of Consumer Advocacy  
Michael L. Brosch, Utilitech, Inc.  
Joseph A. Herz, Sawvel & Associates, Inc.  
David Parcell, Technical Associates, Inc.  
Dr. Kay Davoodi, Department of Defense  
James N. McCormick, Department of Defense  
Theodore E. Vestal, Department of Defense  
Ralph Smith, Larkin & Associates  
Stephen Hill, Hill Associates

**UPDATE OF DR. ROGER A. MORIN**

**RATE OF RETURN ON COMMON EQUITY**

Q. Dr. Morin, do you have an updated recommendation of the fair and reasonable rate of return on the common equity capital (“ROE”) for Hawaiian Electric Company Inc. (“Hawaiian Electric” or the “Company”)?

A. Yes, I do.

Q. Please summarize your updated results and recommendation.

A. The results of the updates are summarized in the table below alongside the original results. The average, median, and truncated mean results are 10.7%, 11.0%, and 10.8%, respectively. From these results, I conclude that a ROE in a range of 10.75% - 11.00% is reasonable. In view of the continuing turmoil and uncertainty in capital markets, and in view of the CAPM’s understatement of capital costs under current crisis conditions, it would be appropriate to use the upper end of the range, absent the revenue decoupling mechanism (“RDM”)/Rider mechanisms. The RDM would include the revenue balancing account (“RBA”) and the revenue adjustment mechanism (“RAM”) jointly proposed by Hawaiian Electric and the Division of Consumer Advocacy in the decoupling proceeding (Docket No. 2008-0274). If the RDM/Rider mechanisms are approved by the Commission, the Company’s risk is reduced, and the cost of common equity capital declines by some 25 basis points. Therefore, in that circumstance it would be reasonable to set the fair and reasonable ROE at the lower end of my recommended range for ratemaking purposes, 10.75%.

The 25 basis points adjustment is based on: 1) utility bond yield spread differentials between A-rated and Baa-rated bonds, 2) observed beta differentials, 3) differential common equity ratio requirements for S&P Business Risk Score, and 4) application of informed judgment.

METHODOLOGY	ROE Original	ROE Updated
CAPM	11.0%	9.4%
Empirical CAPM	11.3%	9.8%
Historical Risk Premium Electric	10.6%	10.9%
Allowed Risk Premium	10.2%	
DCF Vert. Integrated Electric Utilities Value Line Growth	10.5%	11.0%
DCF Vert. Integrated Electric Utilities Zacks Growth	11.9%	11.3%
DCF Electric Utility Index Value Line Growth	11.3%	11.2%
DCF Electric Utility Index Zacks Growth	11.1%	11.4%

- Q. Did you make any methodological changes in your DCF analyses?
- A. The only minor departure from my original DCF analysis is that for my second group of comparable utilities, I relied on the electric utilities that make up the S&P Utility index instead of the Moody's Utility Index because the latter was discontinued following the acquisition of Moody's by Mergent. For reasons of consistency, the S&P Index is used in my historical risk premium analysis.
- Q. Did you make any methodological changes in your historical risk premium analysis of the utility industry?
- A. In light of the financial crisis that began after I prepared my direct testimony, I made two changes. First, as explained above, I relied on the S&P Utility Index instead of the

Moody's Index in order to ensure continuity and timeliness of the risk premium data.

I note that this change does not alter the results significantly.

Second, given the continuing chaotic state of the capital markets at this time, whereas trends in utility cost of capital are directly reflected in their cost of debt, they are not directly captured by a risk premium estimate tied to government bond yields.

Because a utility's cost of capital is determined by its business and financial risks, it is reasonable to surmise that its cost of equity will track its cost of debt more closely than it will track the government bond yield. Therefore, I have performed my historical premium analysis of the utility industry using the A-rated utility bond yield instead of the government bond yield.

I did not implement the allowed risk premium analysis in view of the circularity inherent in this approach.

Q. Dr. Morin, what is your final conclusion regarding Hawaiian Electric's cost of common equity capital?

A. Based on the results of all my analyses, the application of my professional judgment, and the risk circumstances of Hawaiian Electric, it is my opinion that a just and reasonable ROE on Hawaiian Electric's integrated electric utility operations at this time lies in a range of 10.75% - 11.00%. Absent the RDM/Rider mechanisms, a ROE at the upper end of the range is reasonable under current capital market conditions and a ROE at the lower end of the range is reasonable assuming approval of the RDM/Rider mechanisms.

### Integrated Electric Utilities

Line No.	(1)	(2)
	Company Name	Beta
1	ALLETE	0.70
2	Allegheny Energy	1.00
3	Alliant Energy	0.70
4	Amer. Elec. Power	0.70
5	Ameren Corp.	0.80
6	CMS Energy Corp.	0.80
7	Cleco Corp.	0.65
8	DPL Inc.	0.60
9	DTE Energy	0.75
10	Duke Energy	0.65
11	Edison Int'l	0.80
12	Empire Dist. Elec.	0.75
13	Entergy Corp.	0.70
14	Exelon Corp.	0.85
15	FPL Group	0.75
16	FirstEnergy Corp.	0.80
17	G't Plains Energy	0.75
18	Hawaiian Electric	0.70
19	IDACORP Inc.	0.70
20	NV Energy Inc.	0.90
21	PG&E Corp.	0.55
22	Pepco Holdings	0.80
23	Pinnacle West Capital	0.75
24	Portland General	0.70
25	Progress Energy	0.65
26	Public Serv. Enterprise	0.80
27	Southern Co.	0.55
28	TECO Energy	0.85
29	UniSource Energy	0.70
30	Westar Energy	0.75
31	Wisconsin Energy	0.65
32	Xcel Energy Inc.	0.65
	<b>AVERAGE</b>	<b>0.73</b>

Source: VLIA 09/2009

**S&P Electric Utility Index Companies**

Line No.	(1)	(2)	(3)
	Company Name	Beta	Beta
1	Allegheny Energy	1.00	1.00
2	Ameren Corp.	0.80	0.80
3	CMS Energy Corp.	0.80	0.80
4	CenterPoint Energy	0.80	
5	Consol. Edison	0.65	0.65
6	DTE Energy	0.75	0.75
7	Dominion Resources	0.70	
8	Duke Energy	0.65	0.65
9	Edison Int'l	0.80	0.80
10	Entergy Corp.	0.70	0.70
11	Exelon Corp.	0.85	0.85
12	FPL Group	0.75	0.75
13	FirstEnergy Corp.	0.80	0.80
14	Integrys Energy	0.95	
15	NiSource Inc.	0.85	
16	PG&E Corp.	0.55	0.55
17	PPL Corp.	0.70	
18	Pepco Holdings	0.80	0.80
19	Pinnacle West Capital	0.75	0.75
20	Progress Energy	0.65	0.65
21	Public Serv. Enterprise	0.80	0.80
22	Sempra Energy	0.85	
23	Southern Co.	0.55	0.55
24	TECO Energy	0.85	0.85
25	Wisconsin Energy	0.65	0.65
26	Xcel Energy Inc.	0.65	0.65
	<b>AVERAGE</b>	<b>0.76</b>	<b>0.74</b>

Source: VLIA 09/2009

### Utility Industry Historical Risk Premium

Line No.	Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Utility A-Rated Bond Yield	20-year Maturity Bond Value	Gain/Loss	Interest	Bond Total Return	S&P Utility Index Return	Utility Equity Risk Premium Over Bond Returns	Utility Equity Risk Premium Over Bond Yields
1	1931	5.12%	1,000.00						
2	1932	6.46%	850.73	-149.27	51.20	-9.81%	-0.54%	9.27%	-7.00%
3	1933	6.32%	1,015.77	15.77	64.60	8.04%	-21.87%	-29.91%	-28.19%
4	1934	5.50%	1,098.72	98.72	63.20	16.19%	-20.41%	-36.60%	-25.91%
5	1935	4.61%	1,115.47	115.47	55.00	17.05%	76.63%	59.58%	72.02%
6	1936	4.08%	1,071.99	71.99	46.10	11.81%	20.69%	8.88%	16.61%
7	1937	3.98%	1,013.70	13.70	40.80	5.45%	-37.04%	-42.49%	-41.02%
8	1938	3.90%	1,011.04	11.04	39.80	5.08%	22.45%	17.37%	18.55%
9	1939	3.52%	1,054.23	54.23	39.00	9.32%	11.26%	1.94%	7.74%
10	1940	3.24%	1,040.98	40.98	35.20	7.62%	-17.15%	-24.77%	-20.39%
11	1941	3.07%	1,025.27	25.27	32.40	5.77%	-31.57%	-37.34%	-34.64%
12	1942	3.09%	997.03	-2.97	30.70	2.77%	15.39%	12.62%	12.30%
13	1943	2.99%	1,014.97	14.97	30.90	4.59%	46.07%	41.48%	43.08%
14	1944	2.97%	1,003.00	3.00	29.90	3.29%	18.03%	14.74%	15.06%
15	1945	2.87%	1,015.14	15.14	29.70	4.48%	53.33%	48.85%	50.46%
16	1946	2.71%	1,024.58	24.58	28.70	5.33%	1.26%	-4.07%	-1.45%
17	1947	2.78%	989.32	-10.68	27.10	1.64%	-13.16%	-14.80%	-15.94%
18	1948	3.02%	964.17	-35.83	27.80	-0.80%	4.01%	4.81%	0.99%
19	1949	2.90%	1,018.11	18.11	30.20	4.83%	31.39%	26.56%	28.49%
20	1950	2.79%	1,016.77	16.77	29.00	4.58%	3.25%	-1.33%	0.46%
21	1951	3.11%	952.61	-47.39	27.90	-1.95%	18.63%	20.58%	15.52%
22	1952	3.24%	980.97	-19.03	31.10	1.21%	19.25%	18.04%	16.01%
23	1953	3.49%	964.23	-35.77	32.40	-0.34%	7.85%	8.19%	4.36%
24	1954	3.16%	1,048.65	48.65	34.90	8.35%	24.72%	16.37%	21.56%
25	1955	3.22%	991.20	-8.80	31.60	2.28%	11.26%	8.98%	8.04%
26	1956	3.56%	951.65	-48.35	32.20	-1.62%	5.06%	6.68%	1.50%
27	1957	4.24%	908.92	-91.08	35.60	-5.55%	6.36%	11.91%	2.12%
28	1958	4.20%	1,005.38	5.38	42.40	4.78%	40.70%	35.92%	36.50%
29	1959	4.78%	925.83	-74.17	42.00	-3.22%	7.49%	10.71%	2.71%
30	1960	4.78%	1,000.00	0.00	47.80	4.78%	20.26%	15.48%	15.48%
31	1961	4.62%	1,020.74	20.74	47.80	6.85%	29.33%	22.48%	24.71%
32	1962	4.54%	1,010.44	10.44	46.20	5.66%	-2.44%	-8.10%	-6.98%
33	1963	4.39%	1,019.83	19.83	45.40	6.52%	12.36%	5.84%	7.97%
34	1964	4.52%	983.00	-17.00	43.90	2.69%	15.91%	13.22%	11.39%
35	1965	4.58%	992.20	-7.80	45.20	3.74%	4.67%	0.93%	0.09%
36	1966	5.39%	901.59	-98.41	45.80	-5.26%	-4.48%	0.78%	-9.87%
37	1967	5.87%	943.94	-56.06	53.90	-0.22%	-0.63%	-0.41%	-6.50%
38	1968	6.51%	928.99	-71.01	58.70	-1.23%	10.32%	11.55%	3.81%
39	1969	7.54%	894.48	-105.52	65.10	-4.04%	-15.42%	-11.38%	-22.96%
40	1970	8.69%	891.81	-108.19	75.40	-3.28%	16.56%	19.84%	7.87%
41	1971	8.16%	1,051.83	51.83	86.90	13.87%	2.41%	-11.46%	-5.75%
42	1972	7.72%	1,044.47	44.47	81.60	12.61%	8.15%	-4.46%	0.43%

### Utility Industry Historical Risk Premium

Line No.	Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		Utility A-Rated Bond Yield	20-year Maturity Bond Value	Gain/Loss	Interest	Bond Total Return	S&P Utility Index Return	Utility Equity Risk Premium Over Bond Returns	Utility Equity Risk Premium Over Bond Yields
43	1973	7.84%	987.98	-12.02	77.20	6.52%	-18.07%	-24.59%	-25.91%
44	1974	9.50%	852.57	-147.43	78.40	-6.90%	-21.55%	-14.65%	-31.05%
45	1975	10.09%	949.69	-50.31	95.00	4.47%	44.49%	40.02%	34.40%
46	1976	9.29%	1,072.11	72.11	100.90	17.30%	31.81%	14.51%	22.52%
47	1977	8.61%	1,064.35	64.35	92.90	15.72%	8.64%	-7.08%	0.03%
48	1978	9.29%	938.71	-61.29	86.10	2.48%	-3.71%	-6.19%	-13.00%
49	1979	10.49%	900.41	-99.59	92.90	-0.67%	13.58%	14.25%	3.09%
50	1980	13.34%	802.50	-197.50	104.90	-9.26%	15.08%	24.34%	1.74%
51	1981	15.95%	843.97	-156.03	133.40	-2.26%	11.74%	14.00%	-4.21%
52	1982	15.86%	1,005.41	5.41	159.50	16.49%	26.52%	10.03%	10.66%
53	1983	13.66%	1,149.59	149.59	158.60	30.82%	20.01%	-10.81%	6.35%
54	1984	14.03%	975.38	-24.62	136.60	11.20%	26.04%	14.84%	12.01%
55	1985	12.47%	1,113.97	113.97	140.30	25.43%	33.05%	7.62%	20.58%
56	1986	9.58%	1,255.25	255.25	124.70	37.99%	28.53%	-9.46%	18.95%
57	1987	10.10%	955.69	-44.31	95.80	5.15%	-2.92%	-8.07%	-13.02%
58	1988	10.49%	967.63	-32.37	101.00	6.86%	18.27%	11.41%	7.78%
59	1989	9.77%	1,062.76	62.76	104.90	16.77%	47.80%	31.03%	38.03%
60	1990	9.86%	992.20	-7.80	97.70	8.99%	-2.57%	-11.56%	-12.43%
61	1991	9.36%	1,044.85	44.85	98.60	14.34%	14.61%	0.27%	5.25%
62	1992	8.69%	1,063.03	63.03	93.60	15.66%	8.10%	-7.56%	-0.59%
63	1993	7.59%	1,112.26	112.26	86.90	19.92%	14.41%	-5.51%	6.82%
64	1994	8.31%	930.36	-69.64	75.90	0.63%	-7.94%	-8.57%	-16.25%
65	1995	7.89%	1,041.91	41.91	83.10	12.50%	42.15%	29.65%	34.26%
66	1996	7.75%	1,014.12	14.12	78.90	9.30%	3.14%	-6.16%	-4.61%
67	1997	7.60%	1,015.30	15.30	77.50	9.28%	24.69%	15.41%	17.09%
68	1998	7.04%	1,059.61	59.61	76.00	13.56%	14.82%	1.26%	7.78%
69	1999	7.62%	940.94	-59.06	70.40	1.13%	-8.85%	-9.98%	-16.47%
70	2000	8.24%	939.72	-60.28	76.20	1.59%	59.70%	58.11%	51.46%
71	2001	7.78%	1,046.28	46.28	82.40	12.87%	-30.41%	-43.28%	-38.19%
72	2002	7.37%	1,042.55	42.55	77.80	12.03%	-30.04%	-42.07%	-37.41%
73	2003	6.58%	1,087.17	87.17	73.70	16.09%	26.11%	10.02%	19.53%
74	2004	6.16%	1,047.92	47.92	65.80	11.37%	24.22%	12.85%	18.06%
75	2005	5.65%	1,060.65	60.65	61.60	12.22%	16.79%	4.57%	11.14%
76	2006	6.07%	951.73	-48.27	56.50	0.82%	20.95%	20.13%	14.88%
77	2007	6.07%	1,000.00	0.00	60.70	6.07%	19.36%	13.29%	13.29%
<b>Mean</b>							<b>5.0%</b>	<b>5.0%</b>	

Source: Bloomberg website: Standard & Poor's Utility Stock Index % Annual Change, Dec. to Dec.  
Bond yields from Bloomberg

HECO HEARING EXHIBIT 7  
Electric Utility Industry Historical Growth Rates DOCKET NO. 2008-0083

(1) (2) (3) PAGE 8 OF 18

Line No.	Company Name	Earnings Growth 5-Year	Dividend Growth 5-Year
1	ALLETE		
2	Allegheny Energy		-17.5
3	Alliant Energy	7.0	-4.5
4	Amer Elec. Power		-4.0
5	Ameren Corp.	-1.5	
6	Avista Corp.	4.0	-6.0
7	Black Hills	-8.0	3.5
8	CH Energy Group	-1.5	
9	CMS Energy Corp.		-16.5
10	Cen. Vermont Pub. Serv.	3.5	0.5
11	CenterPoint Energy	-2.0	
12	Cleco Corp	0.5	1.5
13	Consol. Edison	1.5	1.0
14	Constellation Energy	3.5	0.5
15	DPL Inc.	7.0	1.5
16	DTE Energy	-2.5	
17	Dominion Resources	5.5	1.5
18	Duke Energy		
19	Edison Int'l	13.5	1.5
20	El Paso Electric	13.5	
21	Empire Dist. Elec.	3.5	
22	Entergy Corp.	10.5	4.5
23	Evergreen Energy Inc		
24	Exelon Corp.	10.5	
25	FPL Group	9.5	5.5
26	FirstEnergy Corp.	12.5	3.0
27	Florida Public Utilities	5.0	-4.0
28	Gr Plains Energy	-4.5	0.5
29	Hawaiian Electric	-6.0	
30	IDACORP Inc.	1.5	-4.5
31	ITC Holdings		
32	Integrys Energy	-1.5	2.5
33	MDU Resources	14.0	5.5
34	MGE Energy	6.0	1.0
35	Maine & Maritimes Corp	-14.5	
36	NSTAR	4.0	4.0
37	NV Energy Inc.		-20.0
38	NiSource Inc	-5.0	
39	NorthWestern Corp		
40	Northeast Utilities	3.0	3.5
41	OGE Energy	11.0	0.5
42	Otter Tail Corp	-1.5	2.5
43	PG&E Corp.	26.5	0.5
44	PNM Resources	-11.5	7.5
45	PPL Corp.	7.5	4.5
46	Pepco Holdings	-2.0	
47	Pinnacle West Capital	-1.0	6.5
48	Portland General		
49	Progress Energy	-6.5	2.5
50	Public Serv. Enterprise	5.5	1.0
51	SCANA Corp.	3.5	1.5
52	Sempra Energy	10.0	-2.5
53	Southern Co.	4.0	2.0
54	TECO Energy	-5.0	-4.0
55	U.S. Energy Sys Inc		
56	UIL Holdings		
57	UNITIL Corp.	1.5	0.5
58	UniSource Energy	-1.5	
59	Vectren Corp.	2.5	
60	Westar Energy	21.5	-6.5
61	Wisconsin Energy	6.0	-4.0
62	Xcel Energy Inc.	1.0	-4.0
	<b>AVERAGE</b>	<b>3.3</b>	<b>-0.5</b>

**Integrated Electric Utilities**  
**DCF Analysis Value Line Growth Rates**

Line No.	Company Name	(1)	(2)	(3)
		Current Dividend Yield	Projected EPS	Growth
1	ALLETE	5.2	[REDACTED]	-1.0
2	Allegheny Energy	2.3	7.5	
3	Alliant Energy	5.8	4.5	
4	Amer. Elec. Power	5.2	3.0	
5	Ameren Corp.	5.6	2.5	
6	CMS Energy Corp.	4.0	10.0	
7	Cleco Corp.	3.9	9.5	
8	DPL Inc.	4.6	8.0	
9	DTE Energy	6.0	7.5	
10	Duke Energy	6.2	5.0	
11	Edison Int'l	3.7	3.5	
12	Empire Dist. Elec.	6.8	8.5	
13	Entergy Corp.	3.9	6.0	
14	Exelon Corp.	4.2	6.0	
15	FPL Group	3.5	7.5	
16	FirstEnergy Corp.	4.8	4.0	
17	G't Plains Energy	4.7	-0.5	
18	Hawaiian Electric	7.0	7.0	
19	IDACORP Inc.	4.1	4.5	
20	NV Energy Inc.	3.8	4.5	
21	PG&E Corp.	4.3	6.5	
22	Pepco Holdings	7.4	2.0	
23	Pinnacle West Capital	6.3	3.0	
24	Portland General	5.2	3.5	
25	Progress Energy	6.2	6.0	
26	Public Serv. Enterprise	4.3	7.5	
27	Southern Co.	5.7	5.0	
28	TECO Energy	5.9	4.5	
29	UniSource Energy	3.9	17.5	
30	Westar Energy	5.8	4.0	
31	Wisconsin Energy	3.1	8.0	
32	Xcel Energy Inc.	5.0	6.5	

Notes:

Column 2, 3: Value Line Investment Analyzer, 09/2009

**Integrated Electric Utilities**  
**DCF Analysis Value Line Growth Rates**

Line No.	Company Name	(1)	(2)	(3)	(4)	(5)	(6)
		Current Dividend Yield	Projected EPS Growth	% Expected Dividend Yield	Cost of Equity	ROE	
1	Allegheny Energy	2.3	7.5	2.5	10.0	10.1	
2	Alliant Energy	5.8	4.5	6.0	10.5	10.8	
3	Amer. Elec. Power	5.2	3.0	5.3	8.3	8.6	
4	Ameren Corp.	5.6	2.5	5.7	8.2	8.5	
5	CMS Energy Corp.	4.0	10.0	4.4	14.4	14.7	
6	Cleco Corp.	3.9	9.5	4.2	13.7	13.9	
7	DPL Inc.	4.6	8.0	4.9	12.9	13.2	
8	DTE Energy	6.0	7.5	6.5	14.0	14.3	
9	Duke Energy	6.2	5.0	6.5	11.5	11.9	
10	Edison Int'l	3.7	3.5	3.9	7.4	7.6	
11	Empire Dist. Elec.	6.8	8.5	7.4	15.9	16.3	
12	Entergy Corp.	3.9	6.0	4.1	10.1	10.3	
13	Exelon Corp.	4.2	6.0	4.4	10.4	10.6	
14	FPL Group	3.5	7.5	3.8	11.3	11.4	
15	FirstEnergy Corp.	4.8	4.0	5.0	9.0	9.3	
16	G't Plains Energy	4.7	-0.5	4.6	4.1	4.4	
17	Hawaiian Electric	7.0	7.0	7.5	14.5	14.9	
18	IDACORP Inc.	4.1	4.5	4.3	8.8	9.0	
19	NV Energy Inc.	3.8	4.5	3.9	8.4	8.6	
20	PG&E Corp.	4.3	6.5	4.5	11.0	11.3	
21	Pepco Holdings	7.4	2.0	7.6	9.6	10.0	
22	Pinnacle West Capital	6.3	3.0	6.5	9.5	9.8	
23	Portland General	5.2	3.5	5.4	8.9	9.2	
24	Progress Energy	6.2	6.0	6.6	12.6	13.0	
25	Public Serv. Enterprise	4.3	7.5	4.6	12.1	12.3	
26	Southern Co.	5.7	5.0	6.0	11.0	11.3	
27	TECO Energy	5.9	4.5	6.2	10.7	11.0	
28	UniSource Energy	3.9	17.5	4.6	22.1	22.3	
29	Westar Energy	5.8	4.0	6.1	10.1	10.4	
30	Wisconsin Energy	3.1	8.0	3.4	11.4	11.6	
31	Xcel Energy Inc.	5.0	6.5	5.3	11.8	12.1	
<b>AVERAGE</b>		<b>4.9</b>	<b>5.9</b>	<b>5.2</b>	<b>11.1</b>	<b>11.4</b>	
<b>MEDIAN</b>						<b>11.0</b>	

Notes:

Column 1, 2, 3: Value Line Investment Analyzer, 09/2009

Column 4 = Column 2 times (1 + Column 3/100)

Column 5 = Column 4 + Column 3

Column 6 = (Column 4 /0.95) + Column 3

ALLETE eliminated: negative growth projection.

**Integrated Electric Utilities**  
**DCF Analysis Analysts' Growth Forecasts**

Line No.	(1) Company Name	(2) Current Dividend Yield	(3) Analysts' Growth Forecast
1	ALLETE	5.2	4.0
2	Allegheny Energy	2.3	13.8
3	Alliant Energy	5.8	4.3
4	Amer. Elec. Power	5.2	3.8
5	Ameren Corp.	5.6	3.7
6	CMS Energy Corp.	4.0	6.3
7	Cleco Corp.	3.9	14.5
8	DPL Inc.	4.6	4.5
9	DTE Energy	6.0	4.0
10	Duke Energy	6.2	4.5
11	Edison Int'l	3.7	6.0
12	Empire Dist. Elec.	6.8	-
13	Entergy Corp.	3.9	6.3
14	Exelon Corp.	4.2	7.0
15	FPL Group	3.5	8.7
16	FirstEnergy Corp.	4.8	6.0
17	G't Plains Energy	4.7	3.0
18	Hawaiian Electric	7.0	6.0
19	IDACORP Inc.	4.1	5.0
20	NV Energy Inc.	3.8	7.0
21	PG&E Corp.	4.3	7.0
22	Pepco Holdings	7.4	5.0
23	Pinnacle West Capital	6.3	6.5
24	Portland General	5.2	-
25	Progress Energy	6.2	4.6
26	Public Serv. Enterprise	4.3	5.8
27	Southern Co.	5.7	7.9
28	TECO Energy	5.9	10.3
29	UniSource Energy	3.9	5.0
30	Westar Energy	5.8	5.7
31	Wisconsin Energy	3.1	8.5
32	Xcel Energy Inc.	5.0	5.2

Notes:

Column 1, 2: Value Line Investment Analyzer, 09/2009  
 Column 3: Zacks long-term earnings growth forecast, 09/2009

**Integrated Electric Utilities**  
**DCF Analysis Analysts' Growth Forecasts**

Line No.	(1) Company Name	(2) Current Dividend Yield	(3) Analysts' Growth Forecast	(4) % Expected Dividend Yield	(5) Cost of Equity	(6) ROE
1	ALLETE	5.2	4.0	5.4	9.4	9.7
2	Allegheny Energy	2.3	13.8	2.6	16.3	16.5
3	Alliant Energy	5.8	4.3	6.0	10.3	10.7
4	Amer. Elec. Power	5.2	3.8	5.4	9.2	9.5
5	Ameren Corp.	5.6	3.7	5.8	9.5	9.8
6	CMS Energy Corp.	4.0	6.3	4.3	10.5	10.8
7	Cleco Corp.	3.9	14.5	4.4	18.9	19.2
8	DPL Inc.	4.6	4.5	4.8	9.3	9.5
9	DTE Energy	6.0	4.0	6.3	10.3	10.6
10	Duke Energy	6.2	4.5	6.5	11.0	11.3
11	Edison Int'l	3.7	6.0	4.0	10.0	10.2
12	Entergy Corp.	3.9	6.3	4.1	10.4	10.7
13	Exelon Corp.	4.2	7.0	4.4	11.4	11.7
14	FPL Group	3.5	8.7	3.8	12.5	12.7
15	FirstEnergy Corp.	4.8	6.0	5.1	11.1	11.4
16	G't Plains Energy	4.7	3.0	4.8	7.8	8.1
17	Hawaiian Electric	7.0	6.0	7.4	13.4	13.8
18	IDACORP Inc.	4.1	5.0	4.3	9.3	9.6
19	NV Energy Inc.	3.8	7.0	4.0	11.0	11.2
20	PG&E Corp.	4.3	7.0	4.6	11.6	11.8
21	Pepco Holdings	7.4	5.0	7.8	12.8	13.2
22	Pinnacle West Capital	6.3	6.5	6.7	13.2	13.6
23	Progress Energy	6.2	4.6	6.5	11.1	11.5
24	Public Serv. Enterprise	4.3	5.8	4.5	10.3	10.5
25	Southern Co.	5.7	7.9	6.1	14.0	14.3
26	TECO Energy	5.9	10.3	6.5	16.8	17.1
27	UniSource Energy	3.9	5.0	4.1	9.1	9.3
28	Westar Energy	5.8	5.7	6.1	11.8	12.1
29	Wisconsin Energy	3.1	8.5	3.4	11.9	12.1
30	Xcel Energy Inc.	5.0	5.2	5.2	10.4	10.7
	<b>AVERAGE</b>	<b>4.9</b>	<b>6.3</b>	<b>5.2</b>	<b>11.5</b>	<b>11.8</b>
	<b>MEDIAN</b>					<b>11.3</b>

Notes:

Column 1, 2: Value Line Investment Analyzer, 09/2009

Column 3: Zacks long-term earnings growth forecast, 09/2009

Column 4 = Column 2 times (1 + Column 3/100)

Column 5 = Column 4 + Column 3

Column 6 = (Column 4 /0.95) + Column 3

Note: No growth forecast available for Empire District, Portland General

**S&P UTILITY INDEX ELECTRIC UTILITIES**  
**DCF ANALYSIS: VALUE LINE GROWTH PROJECTIONS**

	<b>Company</b>	<b>% Current Dividend Yield (1)</b>	<b>Proj EPS Growth (2)</b>
1	Allegheny Energy	2.3	7.5
2	Ameren Corp.	5.6	2.5
3	CMS Energy Corp.	4.0	10.0
4	CenterPoint Energy	6.1	3.0
5	Consol. Edison	5.8	3.0
6	DTE Energy	6.0	7.5
7	Dominion Resources	5.5	8.0
8	Duke Energy	6.2	5.0
9	Edison Int'l	3.7	3.5
10	Entergy Corp.	3.9	6.0
11	Exelon Corp.	4.2	6.0
12	FPL Group	3.5	7.5
13	FirstEnergy Corp.	4.8	4.0
14	Integrys Energy	7.9	5.5
15	NiSource Inc.	6.8	1.0
16	PG&E Corp.	4.3	6.5
17	PPL Corp.	5.1	7.5
18	Pepco Holdings	7.4	2.0
19	Pinnacle West Capital	6.3	3.0
20	Progress Energy	6.2	6.0
21	Public Serv. Enterprise	4.3	7.5
22	Sempra Energy	3.2	5.5
23	Southern Co.	5.7	5.0
24	TECO Energy	5.9	4.5
25	Wisconsin Energy	3.1	8.0
26	Xcel Energy Inc.	5.0	6.5

Notes:

Column 1, 2: Value Line Investment Analyzer, 9/2009

**S&P UTILITY INDEX ELECTRIC UTILITIES**  
**DCF ANALYSIS: VALUE LINE GROWTH PROJECTIONS**

	Company	% Current	% Expected		
		Dividend Yield (1)	Proj EPS Growth (2)	Dividend Yield (3)	Cost of Equity (4)
1	Allegheny Energy	2.3	7.5	2.5	10.0
2	Ameren Corp.	5.6	2.5	5.7	8.2
3	CMS Energy Corp.	4.0	10.0	4.4	14.4
4	CenterPoint Energy	6.1	3.0	6.3	9.3
5	Consol. Edison	5.8	3.0	6.0	9.0
6	DTE Energy	6.0	7.5	6.5	14.0
7	Dominion Resources	5.5	8.0	5.9	13.9
8	Duke Energy	6.2	5.0	6.5	11.5
9	Edison Int'l	3.7	3.5	3.9	7.4
10	Entergy Corp.	3.9	6.0	4.1	10.1
11	Exelon Corp.	4.2	6.0	4.4	10.4
12	FPL Group	3.5	7.5	3.8	11.3
13	FirstEnergy Corp.	4.8	4.0	5.0	9.0
14	Integrys Energy	7.9	5.5	8.3	13.8
15	NiSource Inc.	6.8	1.0	6.9	7.9
16	PG&E Corp.	4.3	6.5	4.5	11.0
17	PPL Corp.	5.1	7.5	5.5	13.0
18	Pepco Holdings	7.4	2.0	7.6	9.6
19	Pinnacle West Capital	6.3	3.0	6.5	9.5
20	Progress Energy	6.2	6.0	6.6	12.6
21	Public Serv. Enterprise	4.3	7.5	4.6	12.1
22	Sempra Energy	3.2	5.5	3.4	8.9
23	Southern Co.	5.7	5.0	6.0	11.0
24	TECO Energy	5.9	4.5	6.2	10.7
25	Wisconsin Energy	3.1	8.0	3.4	11.4
26	Xcel Energy Inc.	5.0	6.5	5.3	11.8
<b>AVERAGE</b>		<b>5.1</b>	<b>5.5</b>	<b>5.4</b>	<b>10.8</b>
<b>MEDIAN</b>					<b>11.1</b>
					<b>11.2</b>

Notes:

Column 1, 2: Value Line Investment Analyzer, 9/2009

Column 3 = Column 1 times (1 + Column 2/100)

Column 4 = Column 3 + Column 2

Column 5 = (Column 3 /0.95) + Column 2

**S&P UTILITY INDEX ELECTRIC UTILITIES**  
**DCF ANALYSIS: VALUE LINE GROWTH PROJECTIONS**  
**Companies With More Than 50% Regulated Revenues**

	<b>Company</b>	<b>% Current</b>		<b>% Expected</b>		<b>ROE</b> <b>(5)</b>
		<b>Dividend Yield (1)</b>	<b>Proj EPS Growth (2)</b>	<b>Dividend Yield (3)</b>	<b>Cost of Equity (4)</b>	
1	Allegheny Energy	2.3	7.5	2.5	10.0	10.1
2	Ameren Corp.	5.6	2.5	5.7	8.2	8.5
3	CMS Energy Corp.	4.0	10.0	4.4	14.4	14.7
4	Consol. Edison	5.8	3.0	6.0	9.0	9.3
5	DTE Energy	6.0	7.5	6.5	14.0	14.3
6	Duke Energy	6.2	5.0	6.5	11.5	11.9
7	Edison Int'l	3.7	3.5	3.9	7.4	7.6
8	Entergy Corp.	3.9	6.0	4.1	10.1	10.3
9	Exelon Corp.	4.2	6.0	4.4	10.4	10.6
10	FirstEnergy Corp.	4.8	4.0	5.0	9.0	9.3
11	FPL Group	3.5	7.5	3.8	11.3	11.4
12	Pepco Holdings	7.4	2.0	7.6	9.6	10.0
13	PG&E Corp.	4.3	6.5	4.5	11.0	11.3
14	Pinnacle West Capital	6.3	3.0	6.5	9.5	9.8
15	Progress Energy	6.2	6.0	6.6	12.6	13.0
16	Public Serv. Enterprise	4.3	7.5	4.6	12.1	12.3
17	Southern Co.	5.7	5.0	6.0	11.0	11.3
18	TECO Energy	5.9	4.5	6.2	10.7	11.0
19	Wisconsin Energy	3.1	8.0	3.4	11.4	11.6
20	Xcel Energy Inc.	5.0	6.5	5.3	11.8	12.1
	<b>AVERAGE</b>	<b>4.9</b>	<b>5.6</b>	<b>5.2</b>	<b>10.7</b>	<b>11.0</b>
	<b>MEDIAN</b>					<b>11.2</b>

Notes:

Column 1, 2: Value Line Investment Analyzer, 9/2009

Column 3 = Column 1 times (1 + Column 2/100)

Column 4 = Column 3 + Column 2

Column 5 = (Column 3 /0.95) + Column 2

Companies with less than 50% regulated revenues:

CenterPoint, NiSource, Dominion, Integrys, PPL, Sempra.

**S&P UTILITY INDEX ELECTRIC UTILITIES**  
**DCF ANALYSIS: ANALYSTS' GROWTH PROJECTIONS**

	Company	% Current Dividend (1)	% Expected Dividend (3)			Cost of Equity (4)	ROE (5)
		Proj EPS Growth (2)	Yield	Yield	Yield		
1	Allegheny Energy	2.3	13.8	2.6	16.3	16.5	
2	Ameren Corp.	5.6	3.7	5.8	9.5	9.8	
3	CMS Energy Corp.	4.0	6.3	4.3	10.5	10.8	
4	CenterPoint Energy	6.1	7.0	6.5	13.5	13.9	
5	Consol. Edison	5.8	3.8	6.1	9.9	10.2	
6	DTE Energy	6.0	4.0	6.3	10.3	10.6	
7	Dominion Resources	5.5	5.3	5.8	11.1	11.4	
8	Duke Energy	6.2	4.5	6.5	11.0	11.3	
9	Edison Int'l	3.7	6.0	4.0	10.0	10.2	
10	Entergy Corp.	3.9	6.3	4.1	10.4	10.7	
11	Exelon Corp.	4.2	7.0	4.4	11.4	11.7	
12	FPL Group	3.5	8.7	3.8	12.5	12.7	
13	FirstEnergy Corp.	4.8	6.0	5.1	11.1	11.4	
14	Integrys Energy	7.9	15.1	9.1	24.2	24.6	
15	NiSource Inc.	6.8	3.0	7.0	10.0	10.4	
16	PG&E Corp.	4.3	7.0	4.6	11.6	11.8	
17	PPL Corp.	5.1	7.5	5.5	13.0	13.2	
18	Pepco Holdings	7.4	5.0	7.8	12.8	13.2	
19	Pinnacle West Capital	6.3	6.5	6.7	13.2	13.6	
20	Progress Energy	6.2	4.6	6.5	11.1	11.5	
21	Public Serv. Enterprise	4.3	5.8	4.5	10.3	10.5	
22	Sempra Energy	3.2	6.5	3.4	9.9	10.1	
23	Southern Co.	5.7	7.9	6.1	14.0	14.3	
24	TECO Energy	5.9	10.3	6.5	16.8	17.1	
25	Wisconsin Energy	3.1	8.5	3.4	11.9	12.1	
26	Xcel Energy Inc.	5.0	5.2	5.2	10.4	10.7	
	<b>AVERAGE</b>	<b>5.1</b>	<b>6.7</b>	<b>5.4</b>	<b>12.2</b>	<b>12.5</b>	
	<b>MEDIAN</b>						<b>11.4</b>

Notes:

Column 1: Value Line Investment Analyzer, 9/2009

Column 2: Zacks Investment Research, 9/2009

Column 3 = Column 1 times (1 + Column 2/100)

Column 4 = Column 3 + Column 2

Column 5 = (Column 3 /0.95) + Column 2

**S&P UTILITY INDEX ELECTRIC UTILITIES**  
**DCF ANALYSIS: ANALYSTS' GROWTH PROJECTIONS**  
**Companies With More Than 50% Regulated Revenues**

	Company	% Current Dividend (1)	% Expected Dividend Proj EPS Growth (2)		Cost of Equity (4)	ROE (5)
		Yield (1)	Yield (3)			
1	Allegheny Energy	2.3	13.8	2.6	16.3	16.5
2	Ameren Corp.	5.6	3.7	5.8	9.5	9.8
3	CMS Energy Corp.	4.0	6.3	4.3	10.5	10.8
4	Consol. Edison	5.8	3.8	6.1	9.9	10.2
5	DTE Energy	6.0	4.0	6.3	10.3	10.6
6	Duke Energy	6.2	4.5	6.5	11.0	11.3
7	Edison Int'l	3.7	6.0	4.0	10.0	10.2
8	Entergy Corp.	3.9	6.3	4.1	10.4	10.7
9	Exelon Corp.	4.2	7.0	4.4	11.4	11.7
10	FirstEnergy Corp.	4.8	6.0	5.1	11.1	11.4
11	FPL Group	3.5	8.7	3.8	12.5	12.7
12	Pepco Holdings	7.4	5.0	7.8	12.8	13.2
13	PG&E Corp.	4.3	7.0	4.6	11.6	11.8
14	Pinnacle West Capital	6.3	6.5	6.7	13.2	13.6
15	Progress Energy	6.2	4.6	6.5	11.1	11.5
16	Public Serv. Enterprise	4.3	5.8	4.5	10.3	10.5
17	Southern Co.	5.7	7.9	6.1	14.0	14.3
18	TECO Energy	5.9	10.3	6.5	16.8	17.1
19	Wisconsin Energy	3.1	8.5	3.4	11.9	12.1
20	Xcel Energy Inc.	5.0	5.2	5.2	10.4	10.7
	<b>AVERAGE</b>	<b>4.9</b>	<b>6.5</b>	<b>5.2</b>	<b>11.7</b>	<b>12.0</b>
	<b>MEDIAN</b>					<b>11.4</b>

Notes:

Column 1: Value Line Investment Analyzer, 9/2009

Column 2: Zacks Investment Research, 9/2009

Column 3 = Column 1 times (1 + Column 2/100)

Column 4 = Column 3 + Column 2

Column 5 = (Column 3 /0.95) + Column 2

Companies eliminated with less than 50% regulated revenues:

CenterPoint, NiSource, Dominion, Integrys, PPL, Sempra.

**Regulatory Research Associates**  
**Authorized ROE's**  
**Through September 4, 2009**

	State	Company	Docket	Type	Increase Authorized		
					Date	Return on Equity	Decoupling (%)
1	Arkansas	Oklahoma Gas and Electric Co.	D-08-103-U	Electric	5/20/2009	10.25	
2	California	Southern California Edison Co.	Ap-07-11-011	Electric	3/12/2009	11.50	X
3	Florida	Tampa Electric Co.	D-080317-EI	Electric	3/17/2009	11.25	
4	Idaho	Avista Corp.	C-AVU-E-09-01	Electric	7/17/2009	10.50	
5	Idaho	Idaho Power Co.	C-IPC-E-09-07	Electric	5/29/2009	10.50	X
6	Idaho	Idaho Power Co.	C-IPC-E-08-10	Electric	1/30/2009	10.50	X
7	Indiana	Indiana Michigan Power Co.	Ca-43306	Electric	3/4/2009	10.50	
8	Louisiana	Entergy New Orleans Inc.	D-UD-08-03 (elec.)	Electric	4/2/2009	11.10	
9	Minnesota	ALLETE (Minnesota Power)	D-E-015/GR-08-415	Electric	4/3/2009	10.74	
10	Missouri	Union Electric Co.	C-ER-2008-0318	Electric	1/27/2009	10.76	
11	Nevada	Nevada Power Co.	D-08-12002	Electric	6/24/2009	10.80	
12	New Mexico	Public Service Co. of NM	C-08-00273-UT	Electric	5/28/2009	10.50	
13	New York	Central Hudson Gas & Electric	C-08-E-0887	Electric	6/18/2009	10.00	X
14	New York	Consolidated Edison Co. of NY	C-08-E-0539	Electric	4/21/2009	10.00	X
15	Ohio	Cleveland Elec Illuminating Co	C-07-0551-EL-AIR (CEI)	Electric	1/21/2009	10.50	
16	Ohio	Duke Energy Ohio Inc.	C-08-0709-EL-AIR	Electric	7/8/2009	10.63	
17	Ohio	Ohio Edison Co.	C-07-0551-EL-AIR (OE)	Electric	1/21/2009	10.50	
18	Ohio	Toledo Edison Co.	C-07-0551-EL-AIR (TE)	Electric	1/21/2009	10.50	
19	Oklahoma	Public Service Co. of OK	Ca-PUD-200800144	Electric	1/14/2009	10.50	
20	Texas	Oncor Electric Delivery Co.	D-35717	Electric	8/13/2009	10.25	
21	Utah	PacifiCorp	D-08-035-38	Electric	4/21/2009	10.61	
				All	21	Average	10.59
				Decoupling	5	Average	10.50
				Not Decoupled	16	Average	10.62

Averages exclude the following as an outlier:

22	Connecticut	United Illuminating Co.	D-08-07-04	Electric	2/4/2009	8.75	X
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HECO HEARING EXHIBIT 8  
DOCKET NO. 2008-0083  
PAGE 1 OF 1

Hawaiian Electric Company, Inc.

**Composite Embedded Cost of Capital**  
**Test Year 2009 Average**  
**(\\$ Thousands)**

		(A)	(B) = (A)/Total(A)	(C)	(D) = (B)*(C)
		<u>Capitalization</u>			
	<u>WP Series Reference</u>	<u>Amount</u>	<u>Percent of Total</u>	<u>Earnings Requirement</u>	<u>Weighted Earnings Requirements</u>
Short-Term Debt	HECO-R-2002	\$ -	0.00%		0.000%
Long-Term Debt	HECO-R-2003	576,569	40.76%	5.81%	2.368%
Hybrid Securities	HECO-2004	27,775	1.96%	7.41%	0.146%
Preferred Stock	HECO-R-2004	20,696	1.46%	5.48%	0.080%
Common Equity	Oct '09 Update	789,374	55.81%	10.75%	5.999%
Total Capitalization		<u>\$ 1,414,414</u>	<u>100.00%</u>		<u>8.593%</u>
<b>Estimated 2009 Test Year Composite Cost of Capital</b>					<b><u>8.59%</u></b>

Totals may not add exactly due to rounding.